

AMENDMENTS TO THE SPECIFICATION

On page 36, lines 22-29, please replace the paragraph beginning on line 22 and ending on line 29 with the following amended paragraph:

The sequence for Kv3.4a is in Gene Bank under accession number X62841 (SEQ ID NO:6; gtgcgttct ctgtcttct ggggttggg ggggcgtgc cccggcccgg agcatccttg tcttgcctc aaccttctga gacccggac ccttggatt ggtcctcga cctgtgtt cacctctgc ctcccctagg ttcttctgc caaatccaa ccacctgtgc accacaaaa gccaaacttt cctgtctcga gcccggggg ggtgggggtg gggggaggca ggggcagagc cactctgcag aagggggcgc caccacctcc tgcctctcc tctccacca cctctctc ctctcgtct cctccccctc cccgttctga cgtgcctcc ttgggaaggg tggttggagg gcagcggccg cccaagccg gagccccga gcgcttcta tgatcagctc ggtgtgtgc tcttctacc gcgggcgcaa gtccgggaac aagcttccgt ccaaaccatg tctgaaggag gagatggcca agggcgaggc gtccgagaag atcatcatca acgtggggc cagcgcagat gagacctacc gcagcacctt gcgcacccta ccgggcacc gccttgcctg gctggcggat cccgacggc ggggtcggc agatcggat ggccggcgtg caggcagcag cggcagcag ggcggcggc ggggctgtga gtttctt ttatcggcacc cgggtgttt tgcctatgtg ctcaactact accgcacgg caagctgcat tgcctccgag acgtctgtg gccttcttt gaggaagag tcaatttctg gggtatcat gagacagatg tgaaccctg ctgttgatg acctaccgc agcaccgca tctgaaggag gcactggaca tcttcgagag cccggacggg ggcgggggtg gcgcagggc cggcgacgag gctggagacg atgagcggga gttggcctg cagcgcctg gccccatga aggaggctt ggcctggg ctgggtccg ggggtgccgt ggctggcagc cccgaatgtg ggcgctctc gaggaccgt actcatccc ggcggccagg gtgtagct ttgcctct ctcttctc ttggttcca ttaccactt ctgcctggag acccagagg ccttcaacat tgaccgaaat gtgacggaga tccaccgggt aggaatatt accagcgtgc gcttccggc ggaggtaga acagaacca ttcttacct catcgaggc gtgtcgtga tgggttcac tctagattc ctggttcga ttgtgtct cctgatacg ttgacittg tcaagaacct gctcaacatc atcgacttg tggcaattt gccctttac ctggagggtg gattgagtg cctgtcatc aaggcagctc gagatgtgt ggggttctg ctgtgtgtc gcttgtac catcctcgg atctcaagc tcacacgca cttgtggg ctgctgtgc tcggccacac actccgggc agcaccaacg agttcctgt gcttatcatc ttctggccc tgggtgtgt catcttggc accatgatct attatgtga gcgaatcgg gccaggccat ctgaccacg gggcaatgac cacaccgact tcaagaacat ccccatcgt ttctgttgg ctgtgttcac catgacaacg ctggctatg gggacatga tctaagaca tggtcaggaa tctgttgg tgcgtgtgt gcactggctg gtgtgctaac cattgccatg cctgtgcctg tcatcgtcaa taactttgt atgtactact ccttggctat ggccaagcag aagcttcca agaaacgaaa gaagcatga ccacggccac cccagctga gtcaccatt tactgcaagt ctgaggagac ttaccccgg gacagcacct acagtacac cagccccct gcccgggaag agggatgtg cgagaggaaa cgagcagact ccaagcagaa tggtagcgt aatgcggtg tctccgatga ggaggagct ggcctcacc agccctggc ctggccccc accctgaag agcgtcagc cctgagacgc tcaggcacac

gggacagaaa caagaaggca gctgcctgct tcctgctcag tgctggggac tatgcctgtg ctgatggcag tgtccagaaa
 gaaggcagtg ttgagccgaa agcgtgcgtc ccagtgtctc acacctgtgc tctttaaaca cagagacctg ccaagacgcc
 ctctcgtcca actatgcccc tgctgaagtc ctcacctctc cttagagcgg caccaacgtg agaaagacag acagacagaa
 agccagaggc ttaggaaaac tctggaaccc aggcacgaat ctttgcctgg gaaagatac cttgtttgca caagactggt
 ggaaaaatct cccatgcaac tctcagggcc cagagccatc tgggtctgat actctgttct actgtacatt gaagagacat atatgcacat
 atagtatcta tattcatata tactatatac tcttgtgtgt agtgcacgtg ctactgggtg tctgtcttca tcgttaggct atgtctcca
 agtctctgc ccacctgtt tccccacccc ctctccttc atggattgtt tctctgacc atgtttttgg agtgtcccag gagaggtata
 cctgggacct gccctccag ctgggtgggc ccaggctgct ctacattggg ggtgtcccct gccagcaggt ggcctgctga
 agtcagttga aggcacgatt gcccttctgg ggtcactgct tcactagc). The sequence for Kv3.4c is identical to the

Kv3.4a sequence except that 62 bp (position 2222-2283) of Kv3.4a are absent in Kv3.4c. As a result of this alternative splicing, the first 608 amino acids of both variants are identical, but the last 17 (for variant a) and 19 (for variant c) amino acids are completely different. Both variants are described by Rudy and colleagues in Veaga-Saenz de Miera E. et al. (1993) Shaw-related K channels in mammals. in Handbook of Membrane Channels: Molecular and Cellular Physiology. (Peracchia C, ed. Academic Press, Orlando) pp 41-78.